160,00 145 GAC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

4

In re the patent of:

KONNO et al.

Patent Number: 5,397,432 Issued: March 14, 1995

For: METHOD FOR PRODUCING SEMICONDUCTOR INTEGRATED CIRCUITS AND

APPARATUS USED IN SUCH METHOD

REQUEST FOR CERTIFICATE OF CORRECTION

Assistant Commissioner for Patents Washington, D.C. 20231

March 10, 1997

CERTIFICATE

Sir:

The undersigned requests that a Certificate of Correction perspect for the above-identified patent as indicated on the attached Form PTO-1050.

REMARKS

This request is being made in order to correct our typographical error in column 11, line 39 and the omission of symbols in Table-1. In support of the corrections to Table-1, we are enclosing a copy of page 24 of the specification.

It is respectfully submitted that no new matter has been added.

Enclosed is a check for One Hundred Dollars (\$100.00) to cover any necessary cost for this change. If however, any additional fees are due, please charge our Deposit Account No. 14-1060.

Respectfully submitted,

NIKAIDO, MARMELSTEIN, MURRAY & ORAM LLP

George E. Oram, Jr.

Reg. No. 27,931

Atty. Case No. P698-1333

Metropolitan Square 655 Fifteenth Street, N.W. Suite 330 - G Street Lobby Washington, D.C. 20005-5701

Tel: (202) 638-5000

GEO:mcm

Enclosures: PTO Form 1050; Copy of Page 24 of the Specification; Check # 12856

810 BL 04/11/97 5397432 2 145 100.00 CK

Table 1

	Conditions	Amount of re µm g/cm ² 10 ¹⁵	sidual chlorine atoms/cm ²	After- corrosion	Symbols shown in Fig. 9
1	Etching only	0.92±0.06	16.0±1.0	Large	Ο
2	Downflow ashing using O ₂ after ①	0.89±0.06	15.5±1.0	Large	
3	Downflow ashing using O2+CF4 after (0.54±0.03	9.3±0.4	Small	
4	Downflow ashing using O2+H2O after (0.23±0.03 D	4.0±0.5	No	♦
(5)	Exposure to H ₂ O after ② (30sec)	0.51±0.02	8.7±0.3	Small	
6	Exposure to H ₂ O after ② (90sec)	0.48±0.01	8.1±0.2	Small	
7	Exposure to H ₂ O after ② (180sec)	0.45±0.04	7.6±0.7	Small	
8	Downflow treatment using H ₂ O after ② (30sec)	0.28±0.01	4.7±0.2	None	Δ
9	Downflow treatment using H ₂ O after ② (90sec)	0.15±0.00	2.5±0.0	No	Δ
(10)	Downflow treatment using H ₂ O after ② (180sec)	0.11±0.01	1.9±0.1	No	Δ
(1)	Downflow treatment using H ₂ after ② (30sec)	0.68±0.01	11.8±0.2	Small	
(2)	Downflow treatment using H ₂ O after ② (90sec)	0.68±0.01	11.7±0.1	Small	
(3)	Downflow treatment using H ₂ after ② (180sec)	0.64±0.01	11.1±0.2	Small	* ·

Exposure to H2O: heated at 120°C in water vapor at 0.1 Torr.

PATENT NO. :

5,397,432

DATES

March 14, 1995

INVESTUR(S):

KONNO et al.

It is cardified that error appears in the above-identified patent and that said Letters Patent is hereby consens as shown below:

Column 11, line 39, delete "or" insert therefor -- and --

5,397,432

MAILING ADDRESS OF SENDER:

Nikaido, Marmelstein, Murray & Oram LLP Metropolitan Square, 655 Fifteenth Street, N.W. Suite 330-G Street Lobby Washington, D.C. 20005-5701

FORM PTO 1050 REV. 3-827

A TENT NO

No. of scall, makes @ 30* per page



PATENT NO. :

5,397,432

DATED

. .

March 14, 1995

INVENTUR(S):

KONNO et al.

It is autified that error appears in the above-identified pattent and that said Letters Patent is hereby

Conditions	Amount of resumg/cm ² ·10 ¹⁵			wn in 3. 9
① Etching only	0.32±0.06	16.0±1.0	Large	0
Downflow ashing using O2 after ①	0.39±0.06	15.5±1.0	Large	•
① Downflow ashing using O2+CF4 after ①	0.54±0.03	9.3±0.4	Small	•
② Downflow ashing using O2+H2O after @	0.23±0.03	4.0±0.5	No	^
(3) Exposure to H ₂ O after (2) (30sec)	0.51±0.02	8.7±0.3	Small	A
© Exposure to H2O after ② (90sec)	0.48±0.01	8.1±0.2	Small	•
D Exposure to H2O after D (180sec)	0.45±0.04	7.6±0.7	Small	A
<pre>Downflow treatment using H2O after ② (30sec)</pre>	0.29±0.01	4.7±0.2	None	Δ
Downflow treatment using H ₂ O after ② (90sec)	0.15±0.00	2.5±0.0	No	Δ
O Downflow treatment using H2O after O (180sec)	0.11±0.01	1.9±0.1	No	۵
O Downflow treatment using H ₂ after O (30sec)	0.68±0.01	11.8±9.2 ·	e Small	▼
© Downflow treatment using H ₂ O after © (90sec)	0.58±0.01	11.7±0.1	Small	▼
O Downflow treatment using H ₂ after O	0.64±0.01	11.1±0.2	Small	•

MAILING ADDRESS OF SENDER:

Nikaido, Marmelstein, Murray & Oram LLP Metropolitan Square, 655 Fifteenth Street, N.W. Suite 330-G Street Lobby

Washington, D.C. 20005-5701

PATENT NO.

5,397,432

No. of scall. water @ 30 c per page



PATENT NO. :

5,397,432

DATED

March 14, 1995

INVENTOR(S):

KONNO et al.

It is cartified that error appears in the above-identified patent and that said Letters Patent is hereby contested as shown below:

Column 11, line 39, delete "or" insert therefor -- and --.

5,397,432

MAILING ADDRESS OF SENDER:

Nikaido, Marmelstein, Murray & Oram LLP Metropolitan Square, 655 Fifteenth Street, N.W. Suite 330-G Street Lobby Washington, D.C. 20005-5701

FORM PTQ 1050 : REV. 3-821

24 TENT NO

No. of sciel. maies @ 30+ per page



PATENT NO.

5,397,432

DATES

•

March 14, 1995

INVEHTUR(S):

KONNO et al.

It is cardified that error appears in the above-identified patent and that said Letters Patent is hereby

Conditions	Amount of residual chlorine umg/cm ² ·10 ¹⁵ atoms/cm ²		After- corrison	Symbols shown in FIG. 9	
① Etching only	0.32±0.06	16.0±1.0	Large	0	
Downflow ashing using Oz after D	0.39±0.06	15.5±1.0	Large	•	
① Downflow ashing using Oz+CF4 after	0.54±0.03 ①	9.3±0.4	Small	. =	
② Downflow ashing using O2+H2O after	0.23±0.03	4.0±0.3	Мо	^	
(D) Exposure to H2O after (D) (30sec)	0.51±0.02	8.7±0.3	Small	.	
® Exposure to H2O after ② (90sec)	0.48±0.01	8.1±0.2	Smal	<u>:</u>	
D Exposure to H2O after D (180sec)	0.45±0.04	7.6±0.7	Smal	1 4	
3 Downflow treatment using H2O after C (30sec)		4.7±0.2	None	: <u> </u>	
<pre>Downflow treatment using H₂O after @ (30sec)</pre>		2.5±0.0	No	۵	
© Downflow treatment using H ₂ O after © (180sec)		1.9±0.1	Яо	٤	
O Downflow treatment using H ₂ after O (30sec)	0.68±0.01	11.3±9.2	Sma	11	
© Jownflow treatment using H ₂ O after (90sec)	_	11.7±0.1	Sma	L <u>:</u>	
O Downflow treatment using H2 after O		11.1±0.2	Sma	11	

MAILING ACCRESS OF SEMICER:

Nikaido, Marmelstein, Murray & Oram LLP Metropolitan Square, 655 Fifteenth Street, N.W. Suite 330-G Street Lobby Washington, D.C. 20005-5701

PATENT NO.

5,397,432

No. of scall. Indies @ 30+ per page

